

## DECISION RECORD

Decision: It is my decision to authorize the issuance of a term grazing permit/lease for public lands on the Old Spears Place Ranch, Allotment #65066/65566 for the term of ten years. Any additional mitigation measures identified in the environmental impacts sections of the attached environmental assessment have been formulated into stipulations, terms and conditions. Any comments made to this proposed treatment were considered and any necessary changes have been incorporated into the environmental assessment.

The fundamentals of rangeland health are set forth in 43 CFR 4180.1 and pertain to watershed functions, ecological processes, water quality and habitat for threatened and endangered (T&E) species and other special status species. Based on the available data and professional judgement, the evaluation by this environmental assessment indicates that the conditions identified in the fundamentals of rangeland health exist on the allotment..

In accordance with 43 CFR 4160.2, any applicant, permittee, lessee, or other affected interests may protest this proposed decision in person or in writing to the authorized officer within 15 days after receipt of this decision. Please be specific in your points of protest. In the absence of a protest, this decision will become final without further notice.

Written appeal may be filed to the Final Decision for the purpose of a hearing before an administrative law judge under 43 CFR 4.470. A period of 30 days after receipt of the Final Decision is provided in which to file an appeal in this office. (43 CFR 4160.3 (c))

Signed by T. R. Kreager  
Assistant Field Manager

5/19/99  
Date

**ENVIRONMENTAL ASSESSMENT  
for  
GRAZING AUTHORIZATION**

**ALLOTMENT 65066, SECTION 03  
and  
ALLOTMENT 65566, SECTION 15**

**EA-NM-066-98-153**

**September, 1998**

**U.S. Department of the Interior  
Bureau of Land Management  
Roswell Field Office  
Roswell, New Mexico**

# **Environmental Assessment for Grazing Allotment 65066 and 65566**

## **I. Background**

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### **A. Introduction**

When authorizing livestock grazing on public range, the Bureau of Land Management (BLM) has historically relied on a land use plan and environmental impact statement to comply with the National Environmental Policy Act (NEPA). A recent decision by the Interior Board of Land Appeals, however, affirmed that the BLM must conduct a site-specific NEPA analysis before issuing a permit or lease to authorize livestock grazing. This environmental assessment fulfills the NEPA requirement by providing the necessary site-specific analysis of the effects of issuing a new grazing permit on Allotment 65066 and a lease on 65566.

The scope of this environmental assessment is limited to the effects of issuing a new grazing permit on Allotment 65066 and a lease on 65566. Over time, the need could arise for subsequent management activities which relate to grazing authorization. These activities could include vegetation treatments (e.g., prescribed fires, herbicide projects), range improvement projects (e.g., fences, water developments), and others. Future management actions related to livestock grazing would be addressed in project-specific NEPA documents as they are proposed.

### **B. Purpose and Need for the Proposed Action**

The purpose of issuing a new grazing lease would be to authorize livestock grazing on public range on Allotment 65016. The lease would be needed to specify the types and levels of use authorized, and the terms and conditions of the authorization pursuant to 43 CFR 4130.3, 4130.3-1, and 4130.3-2.

### **C. Conformance with Land Use Planning**

Upon review of the Roswell Resource Management Plan/Environmental Impact Statement (Bureau of Land Management 1997), the proposed action was found to conform with the Record of Decision as required by 43 CFR 1610.5-5.

### **D. Relationships to Statutes, Regulations, or Other Plans**

The proposed action and alternatives are consistent with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (33 U.S.C. 1251 et seq.), as amended; the Endangered Species Act (16 U.S.C. 1535 et seq.) as amended; the Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et

seq.); Executive Order 11988, Floodplain Management; and Executive Order 11990, Protection of Wetlands.

## **II. Proposed Action and Alternatives**

### **A. Proposed Action:**

To authorize the grazing lease/permit on the Old Spears Place allotment # 65066 for 65 AU's (413 AUMs at 100% public land) and allotment 65566 for 2 AU's (24 AUM's at 100% public land). Specifically, to authorize a grazing lease for 67 cows on both allotments combined from March 1 to the last day of February of each year at 100% public land, while continuing current livestock management practices.

### **B. No Permit/Lease authorization alternative:**

This alternative, if selected, would be to not issue a new grazing lease for the Old Spears Place allotment #65066 and 65566. No grazing would be authorized on federal land under this alternative. The No Grazing alternative was considered, but not chosen in the Rangeland Reform Environmental Impact Statement (EIS) Record of Decision (ROD) (p. 28). The elimination of grazing in the Roswell Field Office Area was considered but eliminated by the Roswell RMP/ROD (pp. ROD-2).

## **III. Affected Environment**

### **General Setting**

Allotment #65066 and 65566 is located in Chaves County, about fortyfive miles east of Roswell. These two allotments are utilized as one for grazing management purposes. They are only separated due to the grazing district boundary. There are two pastures ranging in size from approximately 2 to 4 sections. Both allotments combined have approximately 2500 acres of public land. The largest portion of the public land is located on the western side below the caprock and bounds the grazing district boundary.

This ranch is comprised of both Section 15 and Section 3 lands. Allotment #65566 lies outside the Roswell Grazing District Boundary established subsequent to the Taylor Grazing Act and is classified as a Section 15 Grazing Lease. Allotment #65066 is within the grazing district.

Normally, the permitted use on Section 15 Leases is established by the amount of forage produced on the public lands within the lease. The overall livestock numbers on the allotment are not established by the Bureau of Land Management. In southeast New Mexico, this is due primarily to either the small amount of public land and/or the public lands are situated in small or isolated tracts that can not be

managed as efficiently as larger well blocked public lands.

This allotment is comprised of three vegetative communities, the Shinnery Oak Dune (SOD), Mixed Desert Shrub (MDS) and the Grassland (GR) Communities. On most of the public land, the MDS is the dominant of the two plant communities. The SOD community comprises approximately 20 percent of the allotments and is located on the western edge in Section 29. There is approximately 120 public land acres on top of the caprock that makes up the grassland plant community.

Before entering into the SOD community west of the caprock, there is approximately 1 mile of rolling mesquite hummocks with large eroding drainages.

The primary features in the SOD community are topography influenced by aeolian and alluvial sedimentation on upland plains forming hummocks, dunes, sand ridges and swales and the presence of shinnery oak.

This is a unique community type found primarily below the Llano Estacado or Staked Plains, in an area known as Mescalero Sands. It lies in the Canadian Plains and Southern Desert ecosystem between the elevations of 4,100 feet and 4,300 feet. The topography is gently sloping and undulating sandy plains, with moderate hummocky dunes. Annual precipitation for this region averages 12 -13 inches.

The following resources or values are not present or would not be affected by the authorization of livestock grazing on Allotment #65066 and 65566; Prime/Unique Farmland, Cultural Resources, Native American Religious Concerns, Wild and Scenic Rivers, Hazardous Wastes, water quality, riparian/wetlands, floodplains, Areas of Critical Environmental Concern, and Minority/low Income populations.

Cultural inventory surveys would continue to be required for federal actions involving surface disturbing activities except where criteria to exempt surveys are met. Eligible and potential eligible sites would continue to be protected from damage or archaeologically treated to mitigate damage.

The impact of the proposed action and alternatives to minority or low-income populations or communities has been considered and no significant impact is anticipated.

## **A. Affected Resources**

1. Soils: Based on the Northern Chaves County Soil Survey the general soils mapping for this area shows a Faskin-Roswell Complex, Ima Fine Sandy Loam and Kimbrough associations.

### **Faskin -Roswell Complex**

This complex occurs on severely wind blown uplands just west of the High Plains. Slopes are 0 to 15 percent. The undulating to rolling Roswell soil is on round to oval

hummocks about 5 to 50 feet in diameter and 4 to 8 feet high. The hummocks are partially stabilized by vegetation.

### Ima Fine Sandy Loam

This nearly level to gently sloping soil occurs in the eastern part of the survey area on alluvial fans and below breaks on the High Plains. Slopes are 1 to 5 percent. Runoff is medium or slow. The hazard of water erosion is severe, and hazard of soil blowing is moderate. Gullies on this soil are caused by runoff from the steep and higher lying areas.

### Kimbrough-Sharvana Complex

Occurs along the Chaves and Lea county lines with slopes 1 to 3 percent. The nearly level to gently undulating soil is on low ridges. Runoff is moderate with erosion being slight. This complex is used for grazing, wildlife habitat, and crushed caliche.

## 2. Vegetation:

The primary ecological (range) site on this allotment is a Sandy Loam CP-2. The primary grasses are a variety of grama grass species, threeawns species and dropseed species. Bluestem species are a minor component on this site. The shrub species is dominated by mesquite and yucca with a minor amount of shinnery oak. The site supports a variety of forb species.

A Deep Sand CP-2 range site occurs on the far western edge of the allotment. Key vegetation is shinnery oak with bluestem and dropseed grasses. The Deep Sand community is a unique ecological area dominated by tall and mid-grasses. In many areas, the shinnery oak community has shifted from a dominant sand bluestem/little bluestem/hairy grama grassland with varying amounts of shinnery oak, sand sage and yucca to a community dominated by sand dropseed, red and purple three-awn, hairy grama, and scattered bluestems with increasing annual forbs, shinnery oak, mesquite, sand sage and yucca.

A Loamy HP-3 range site occurs on top of the Caprock and makes up the 120 acres of grassland. Black grama, tabosa, muhly, and mesquite are the most abundant plant species.

The Roswell Field Office (RFO) has extensive amounts of vegetative data for this allotment because of the allotment categorization. There have been numerous vegetative monitoring studies done on this allotment since the initial vegetation inventory completed in 1979. Data in 1981 placed the range condition in a high-poor category. However, since that time the long term average for the public lands is a mid (fair) ecological rating for both sites.

The current vegetative resources on this allotment appear to be stable and the rangeland trend is static. The data used for this assessment is available at the Roswell Field Office.

### 3. Wildlife:

The Caprock Wildlife Habitat Area (WHA) includes a portion of the CATO Bros. allotments. The Caprock WHA provides diverse habitat for more than 54 birds species, 33 species of mammals, and 36 species of reptiles and amphibians.

Raptors that are frequently associated with the vegetation types on this allotment are the red-tailed hawk, swainson's hawk, ferruginous hawk, roughlegged hawk, common nighthawk, and the american kestrel.

Game bird species in this areas include the lesser prairie chicken, scaled and bob white quail, and the mourning dove.

Other bird species that are usually observed are the turkey vulture, roadrunner, chihuahuan raven, great-horned owl, burrowing owl, northern flicker, loggerhead shrike, western meadowlark, western kingbird, pyrrhuloxia, homed lark, and other passerine birds.

At least 33 species of mammals occur on or utilize this allotment. The diversity of small mammals provide for an excellent prey base for carnivores such as the coyote, gray fox, bobcat, raccoon, badger, hooded skunk and striped skunk.

Mammals that provide a prey base include the black-tailed jack rabbit, desert cottontail, spotted ground squirrel, pocket mice, deer mouse, kangaroo rats, northern grasshopper mouse, harvest mice, and the white throated woodrat.

Two big game species that occur the allotment are pronghorn antelope and mule deer.

Reptiles and amphibians that inhabit the area are the dune sagebrush lizard, southern prairie lizard, lesser earless lizard, side-blotched lizard, longnose leopard lizard, sixlined racerunner, tree lizard, skinks, western diamond back, western rattlesnake, coachwhip, spadefoot toads, western box turtle, and the yellow mud turtle.

### 4. Threatened/Endangered Species

Federal threatened, endangered and candidate species as well as state-listed threatened or endangered species potentially occurring within the proposed project area will be analyzed in this document.

There are no known Federal threatened and endangered species or critical habitat within the allotment.

However, there are several Federal Candidate and State listed species that may potentially occupy or utilize the area. These include the swift fox, mountain plover, lesser prairie chicken and the Sand Dune lizard. For a detailed description of the range, habitats, and potential threats to the swift fox and the mountain plover, refer to the Biological Opinion (AP1 1-38) in the Roswell RMP. There are no known federally threatened or endangered species occurring within the proposed action area.

#### Special Status Species:

##### Sand Dune Lizard

The State Threatened sand dune lizard only occurs in the southeastern corner of New Mexico and the western region of Texas. Within that range its habitat is restricted to active sand dunes and their peripheries (Degenhardt and Jones 1972). Shinnery oak is the dominate plant species that surrounds the top edge of the active sand dune, with a small composition of grasses inside the blowout area.

During 1991 a study was begun to examine the effects of the removal of shinnery oak on lizard habitat. Through five years of research it was demonstrated that there were 70%-94% fewer lizards in treated pastures as compared to non-treated pastures. As a result, the use of herbicides within suitable sand dune lizard habitat (blowouts) will be avoided.

##### Lesser Prairie Chicken

Recently a petition was filed with the U. S. Fish and Wildlife Service (FWS) to list the prairie chicken as threatened. On June 1, 1998 the FWS announced a finding for the petition. After review of all available scientific and commercial information, the Service finds that listing this species is warranted but precluded by other higher priority actions to amend the Lists of Endangered and Threatened Wildlife and Plants. The lesser prairie chicken is added to the Service's candidate species list.

In southeastern New Mexico, lesser prairie chickens exist in the shrub-dominated High Plains Bluestem Subtype by using mixed stands of tall grass and shinnery oak.

The Roswell Field Office had actively monitored lesser prairie chicken booming grounds, population trends and habitat since the early seventies. Historically in New Mexico, the LPC occupied most of the eastern plains. However, numbers and occupied range of the species are much reduced since pre-settlement times; apparently in response to agricultural development, prolonged heavy grazing and brush control in combination with the great drouths of the 1930's and 1950's. It has been reported that currently the LPC occupies approximately one half their original range in New Mexico.



Since the early 1970's LPC populations have fluctuated up and down with the highest period occurring during the middle 1980's. Even though a portion of these allotments are located within the shinnery oak dune plant community, there have been no documented booming grounds located on or near the public lands in the past 25 years. Future surveys are needed to verify the absence of booming grounds.

#### 5. Livestock Management:

The allotment is grazed by cattle. The latest grazing permit/lease was for 67 Aus. Actual livestock numbers on the allotments may vary depending on vegetative and economic conditions. In shinnery oak dominated pastures livestock are removed during the period that shinnery is toxic, normally mid March and April, to prevent livestock loss.

#### 6. Visual Resources:

The allotment is located in a Class IV Visual Management Area. The Class IV rating means that contrasts may attract attention and be a dominant feature in the landscape in terms of scale. However, the changes should repeat the basic elements of the landscape.

#### 7. Air Quality:

The allotment is in a Class II area for the Prevention of Significant Deterioration of air quality as defined in the federal Clean Air Act, which allows a moderate amount of air quality degradation. Air quality is generally good, Winds are typically southeasterly during the summer, and becoming southwesterly in the winter and early spring. Winds average 10 miles per hour in the fall and 16 miles per hour in the spring, with peak velocities reaching 50 miles per hour. These conditions rapidly disperse air pollutants in the region.

#### 8. Recreation:

Recreation opportunities are limited in this grazing allotment because the public has limited legal/physical access to public lands due to terrain and the private and state lands off of highway 172. The primary recreational activity occurring in this area is hunting. Mule deer, pronghorn antelope, and game birds such as quail and dove are taken during hunting seasons set by the New Mexico Department of Game and Fish.

Off Highway Vehicle designation for public lands within this allotment are classified as "Limited" to existing roads and trails.

### **IV. Environmental Impacts**

## **A. Impacts of the Proposed Action**

### **1. Soils:**

The permitted use as described in the proposed action is not anticipated to have any adverse impact to the current soil conditions. Some soil loss would continue to occur due to the windy conditions that prevail in this region during parts of the year. If vegetative cover remains stable soil loss may be minimized.

Changes in vegetative ground cover is often linked to the amount and timing of precipitation events. This assessment is based on the assumption that the area will receive at least the long term average in precipitation both in timing and amount.

### **2. Vegetation:**

The continuance of the permitted use at the current use levels authorized by the expiring lease is not anticipated to have any adverse impact to the current vegetative conditions. The vegetation will continue to be grazed and trampled by domestic livestock as well as other herbivores such as antelope, mule deer, rabbits, rodents and insects. Under the proposed action, it is not anticipated that a significant change in the vegetative composition or amount available for use will occur. The continuance of the present livestock management practices is not anticipated to alter the vegetative composition. The pastures will continue to get some rest as outlined in the affected environment. Ecological condition and trend is expected to remain stable or increase over the long term at this permit number.

### **3. Wildlife:**

Under the proposed action, wildlife will continue to compete with domestic livestock for space, forage and browse. With proper livestock management and carrying capacities, there will be adequate cover and forage for wildlife species; resulting in sustainable wildlife populations for those species that occupy or utilize the area. Maintenance and availability of existing waterings will continue to prove a dependable water source for wildlife, as well as livestock.

### **4. Threatened/Endangered Species:**

Under the proposed action there would be no affect to Federal threatened and endangered species since there are no known T/E occurrences within this allotment.

#### **Special Status Species**

Under the proposed action, there would be minimal impacts to the sand dune lizard due to the dispersal of livestock. Areas where there is a concentration of livestock (waterings and fence corners) the habitat may be of lower quality, but these areas are small in nature. Range improvements (pipelines) may enhance lizard habitat by

creating open dunal areas that are usually bordered by shinnery oak.

Under the proposed action, what little lesser prairie chicken habitat occurs would continue to be maintained under the current permitted livestock numbers.

#### 5 Livestock Management:

Under the proposed action there would be no impacts to the current livestock management. The allotment would continue to be grazed in the same manner as it is currently.

#### 6. Visual Resources:

The continued grazing of livestock would not affect the form or color of the landscape, or the primary aspect of the vegetation within the allotment.

#### 7. Air Quality:

The impacts to air quality would not change from the current situation. A minor amount of air quality degradation would continue.

#### 8. Recreation:

Grazing would have little or no affect on the recreational opportunities. Legal access from the south or west to this parcel of public land would still remain available. Recreation activities that could occur within this grazing allotment are somewhat limited due to land ownership patterns.

#### 9. Significant Caves/Karst

No known significant caves or karst features are known to exist on the public lands located within this allotment. Grazing would not affect the karst resources.

### **B. Impacts of the No Livestock Grazing Alternative.**

The No Livestock Grazing Alternative has been previously analyzed at the National level in the Rangeland Reform '94 EIS and in the Roswell RMP/EIS. An in depth analysis of this alternative will not be made in this document. General impacts under this alternative would include no new rangeland improvement and the removal of existing rangeland improvements unless a determination was made that they were beneficial to other uses. Since no grazing authorizations on public lands would be permitted, livestock operators grazing lands adjoining Federal lands would be responsible for preventing the unauthorized use of these Federal lands. The BLM would not fence these lands. Rangeland administrative emphasis would shift to

issuing crossing permits to or from nonfederal land inholdings and resolving unauthorized use.

## **V. Cumulative Impacts**

Cumulative impacts of the grazing and no grazing alternatives were considered in Chapter 4 of Rangeland Reform '94 Draft Environmental Impact Statement and in Chapter 4 of the Roswell Resource Area Proposed RMP/EIS. The no livestock grazing alternative was not selected in either document.

On the allotment specific level, there will be no cumulatively significant impacts from the proposed action /alternatives or from the no grazing alternative.

## **VI. Residual Impacts**

The area has been grazed by livestock since the early part of the 1900's if not longer. Recent vegetative monitoring studies have shown that grazing , at the current permitted numbers of animals, is sustainable. If the mitigation measures are enacted, then there would be no residual impacts to the proposed action

## **VII. Mitigating Measures And/Or Permit/Lease Conditions**

Vegetation monitoring studies will continue to be conducted and the permitted numbers of livestock will be adjusted if necessary. If new information surfaces that livestock grazing is negatively impacting other resources, action will be taken at that time to mitigate those impacts.

## Literature Cited

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- Jones, R.E. 1963. Identification and analysis of lesser and greater chicken habitat. *Journal of Wildlife Management* 27: 757-778.
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- Riley, T.Z., C.A. Davis, M. Ortiz, and M.J. Wisdom. 1992. Vegetative characteristics of successful and unsuccessful nests of Lesser Prairie Chickens. *J. Wildl. Manage.* 56: 383-387.
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FINDING OF NO SIGNIFICANT IMPACT/RATIONALE

FINDING OF NO SIGNIFICANT IMPACT: I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. I have determined the **proposed action** will not have significant impacts on the human environment and that preparation of an Environmental Impact Statement (EIS) is not required.

Rationale for Recommendations: The proposed action would not result in any undue or unnecessary environmental degradation. The **proposed action** will be in compliance with the Roswell Resource Management Plan and Record of Decision (October, 1997).

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T. R. Kreager,  
Acting Assistant Field Office Manager - Resources

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Date